

BookletChartTM

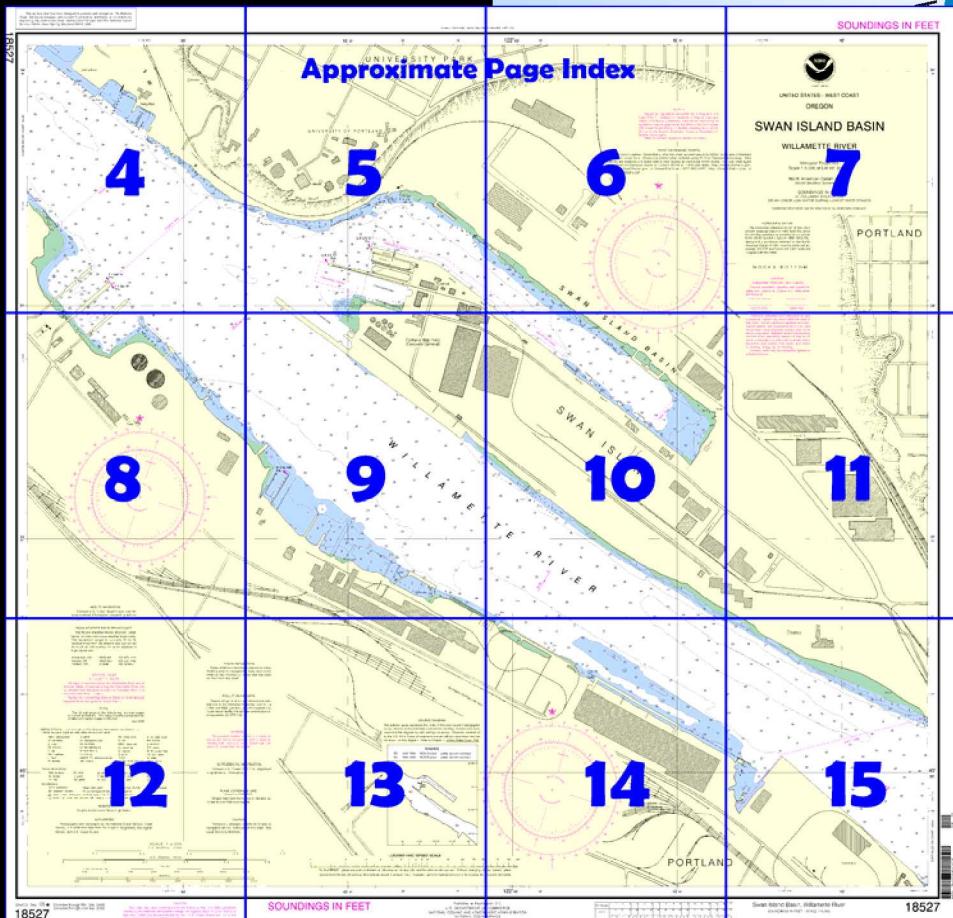
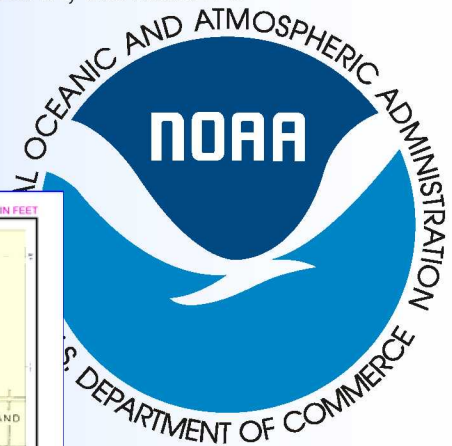
Swan Island Basin – Willamette River

(NOAA Chart 18527)

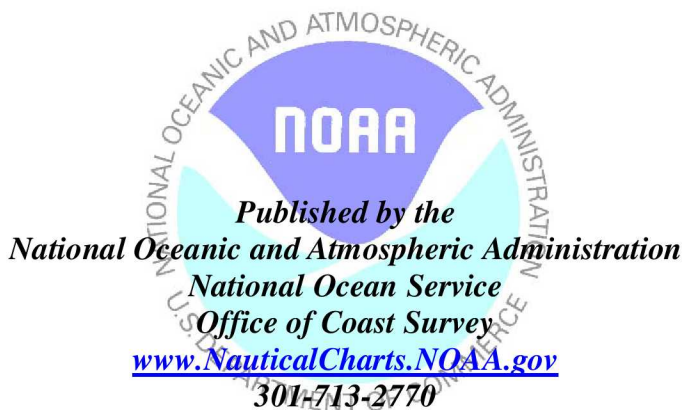


A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ✓ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ✓ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)



What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

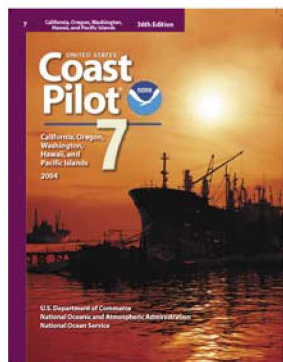
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 7, Chapter 10 excerpts]

(211) **Multnomah Channel** is a 19-mile waterway separated from the Columbia River near Saint Helens and from the Willamette River near Portland by **Sauvie Island**. Depths are 20 feet or more at the entrances, but decrease to 6 feet inside. A power cable about midway through the channel has a clearance of 100 feet. A small-boat landing is 1 mile S from the power cable. Covered berths, with electricity, gasoline, diesel fuel, water, ice, a launching ramp, and marine supplies are available. Minor hull and engine repairs can be made. Wet winter boat storage is at the landing. A fixed highway bridge near the S end has a clearance of 78 feet.

(216) At Mile 88 (101.2), Columbia River is joined by **Willamette River**, its largest tributary below the Cascade Mountains. The Willamette drains a large territory and is important as the site of the city of Portland, 9 (10.4) miles above its mouth.

(224) **Portland**, on Willamette River about 9 (10.4) miles from its mouth, is the principal city of the Columbia River system and one of the major ports on the Pacific coast. The port has over 25 deep-draft piers and wharves on both sides of the Willamette River between its junction with the Columbia and Ross Island. In addition there are extensive facilities for small vessels and barges S of Hawthorne Bridge and at North Portland Harbor, S of Hayden Island. It has extensive commerce, both foreign and domestic, and is the port of call for many lines of coastwise, intercoastal, and transpacific steamships. Principal foreign exports are grain, tallow, fish and shellfish, fruits, textile products and apparel, paper, wood pulp, lumber and other forest products, chemicals, fertilizer, and metal ores. The principal imports are fish and shellfish, metal ores, salt, fruit and vegetables, pulp, lumber and other forest products, chemicals, iron and steel, automobiles, and machinery. The coastwise trade consists mainly of petroleum products, lumber, chemicals, iron and steel, and cement.

(225) The **Port of Portland**, created by the State in 1891, is controlled by a Port Commission and administered by an executive director. The port owns four marine terminals, Port of Portland Ship Repair Yard, and dredges the channel between Broadway and Ross Island Bridges; it also assists the Corps of Engineers with other dredging in the Willamette and Columbia Rivers. The port also operates an international airport and three general aviation airports. A 30-inch hydraulic pipeline dredge is owned by the port. In addition to dredging the port waterfront and river channel, the port conducts hydrographic surveys periodically along all port-owned piers and wharves.

Table of Selected Chart Notes

Corrected through NM 24/05
Corrected through LNM 20/05

HEIGHTS

Heights in feet above Mean High Water.

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.576" southward and 4.354" westward to agree with this chart.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

PLANE COORDINATE GRID (based on NAD 1927)

Oregon State Grid North Zone is indicated by dotted ticks at 2000 foot intervals.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Woodland, WA	WNG-604	162.525 MHz
Astoria, OR	WNG-697	162.525 MHz
Portland, OR	KIG-98	162.55 MHz

TIDES

The diurnal range of the tide during low river stages is 2.4 feet at Portland. The range becomes progressively smaller with higher stages of the river.

July 2005

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, Washington or at the Office of the District Engineer, Corps of Engineers in Seattle, Washington.

Refer to charted regulation section numbers.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

Mercator Projection
Scale 1:5,000 at Lat 45° 33' 30"

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT COLUMBIA RIVER DATUM
(MEAN LOWER LOW WATER DURING LOWEST RIVER STAGES)

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Is isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstr obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
(1) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.			

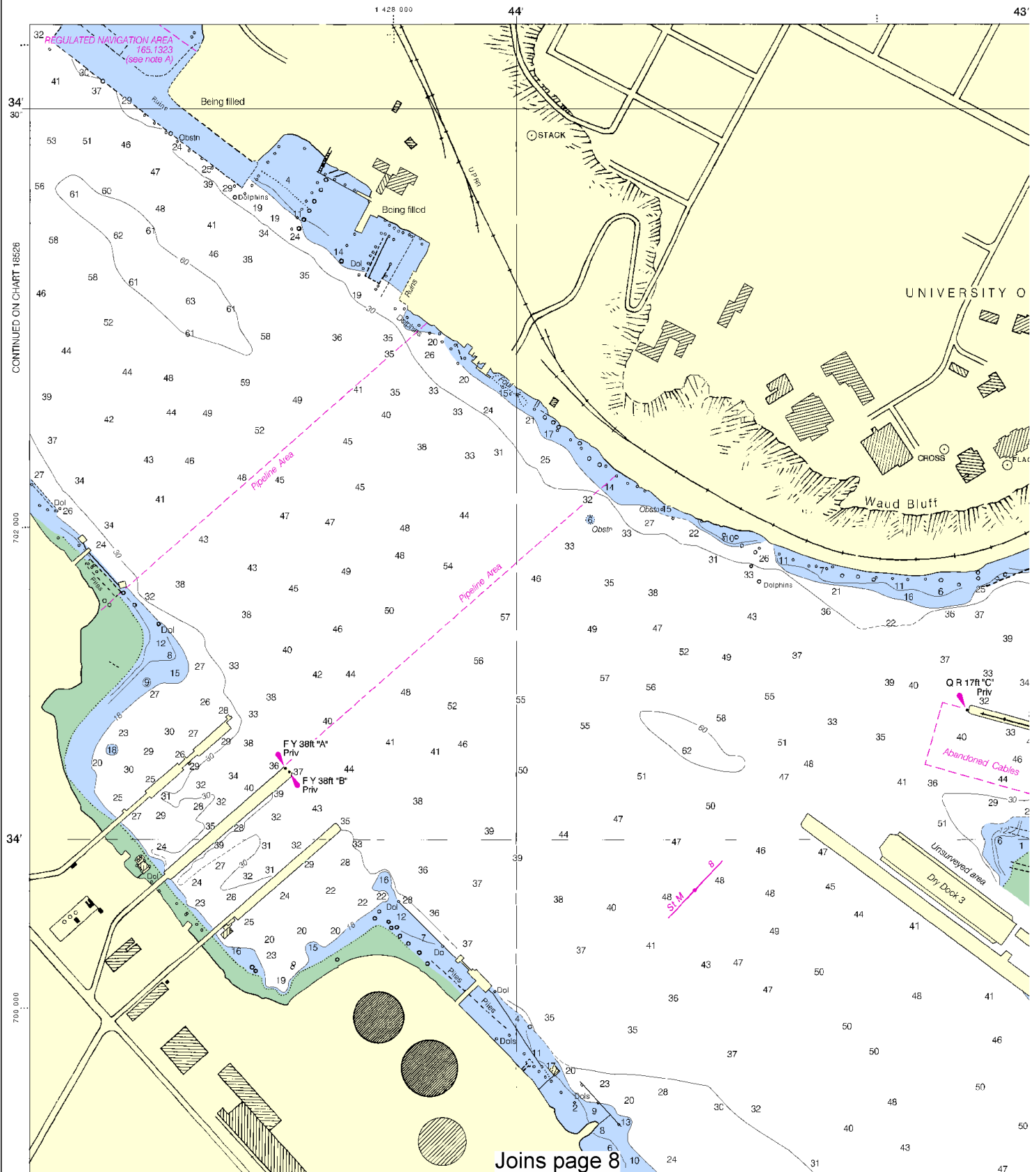
PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4663, <http://NauticalCharts.gov>, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, <http://OceanGrafix.com>, or help@OceanGrafix.com.

Additional information can be obtained at nauticalcharts.noaa.gov.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

18527



4



Printed at reduced scale.

SCALE 1:5,000
0.5 Nautical Miles

See Note on page 5.

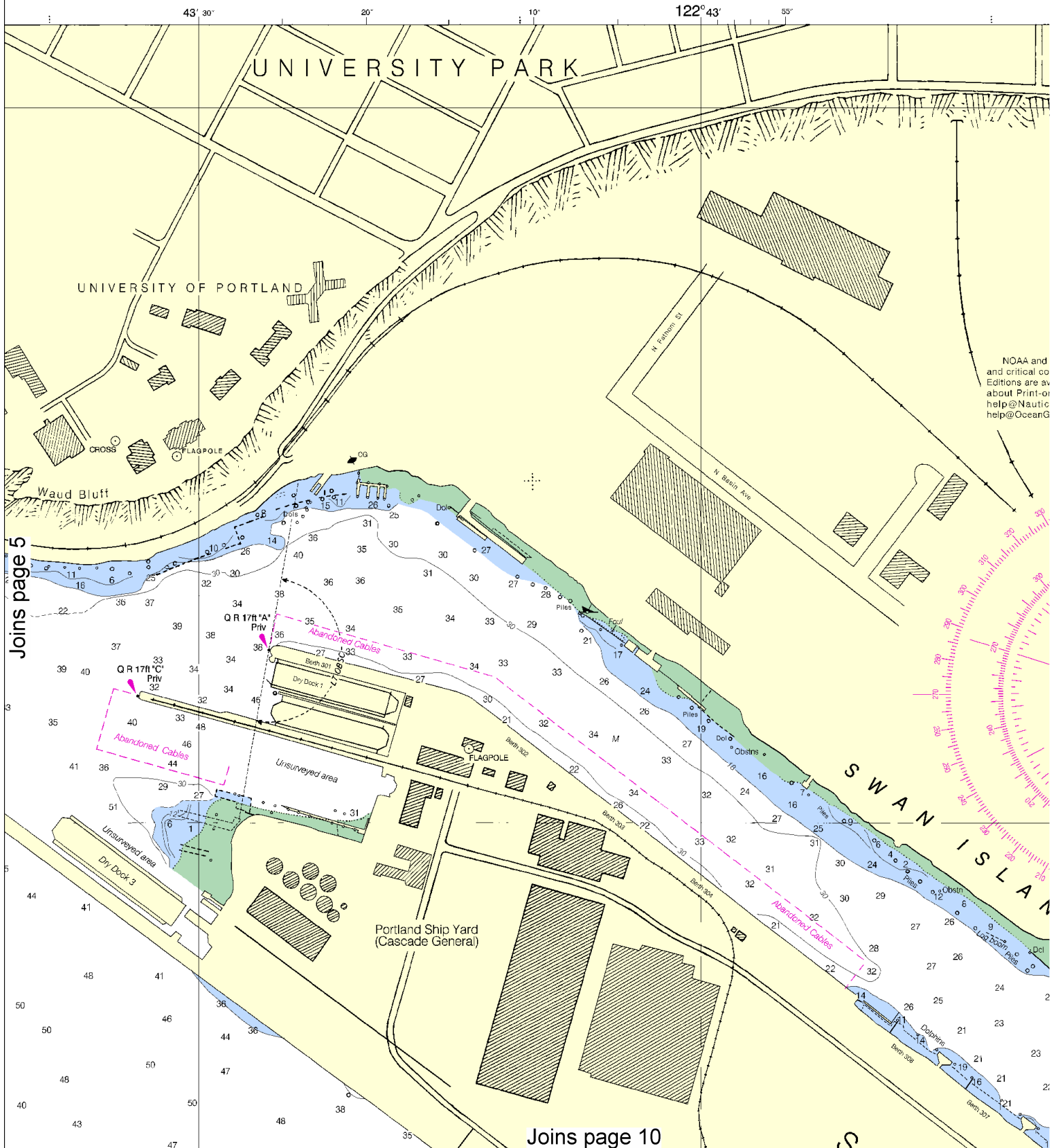


NOAA and its partner, OceanGrafix, offer this chart up and critical corrections. Charts are printed when orders are received. Editions are available 5-8 weeks before their release as time permits. For more information, visit our website at www.noaa.gov or call 1-800-368-5848. For more information about Print-on-Demand charts or contact NOAA at help@NauticalCharts.gov, or OceanGrafix at help@OceanGrafix.com.

Joins page 6

Joins page 9, 2

This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:6667. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



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Joins page 5

Joins page 10

6



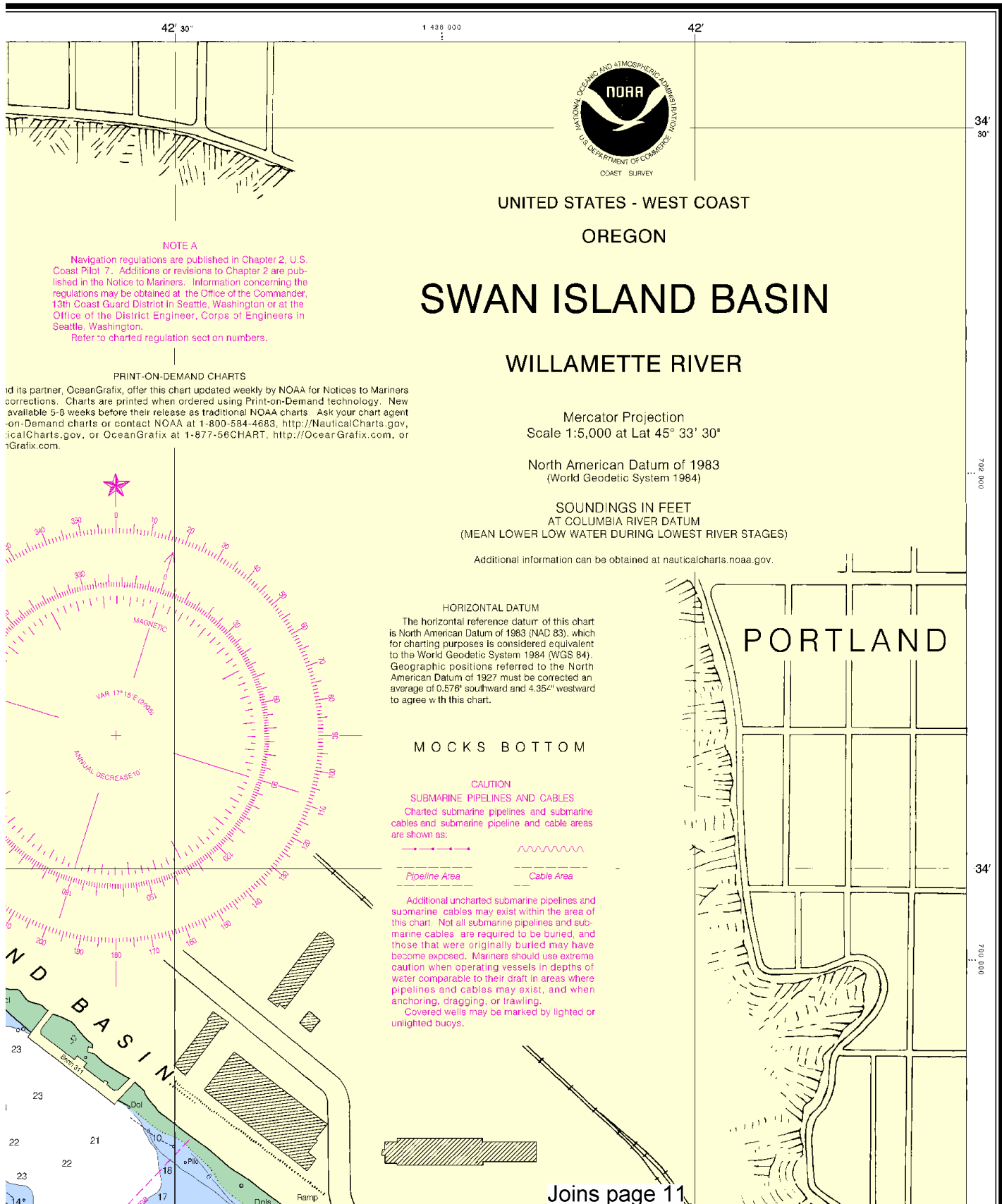
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SCALE 1:5,000
0.5 Nautical Miles

See Note on page 5.



SOUNDINGS IN FEET



This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0710 2/16/2010,
NGA Weekly Notice to Mariners: 0910 2/27/2010,
Canadian Coast Guard Notice to Mariners: n/a .

Joins page 4

8
S.M.

Abandoned Cables
Unsurveyed area
Dry Dock 3

FY 38ft "A"
Priv
FY 38ft "B"
Priv

FI R 4s 12ft
Priv

VAR 17°15' E (2000)
ANNUAL DECREASE 10'

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Woodland, WA	WNG-604	162.525 MHz
Astoria, OR	WNG-697	162.525 MHz
Portland, OR	KIG-98	162.55 MHz

Joins page 12

RADAR REFLECTORS
reflectors have been placed on many

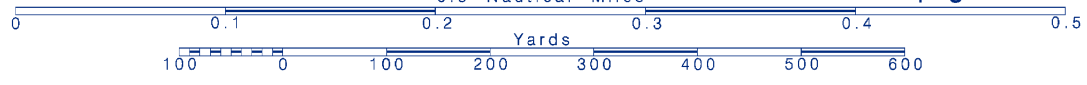
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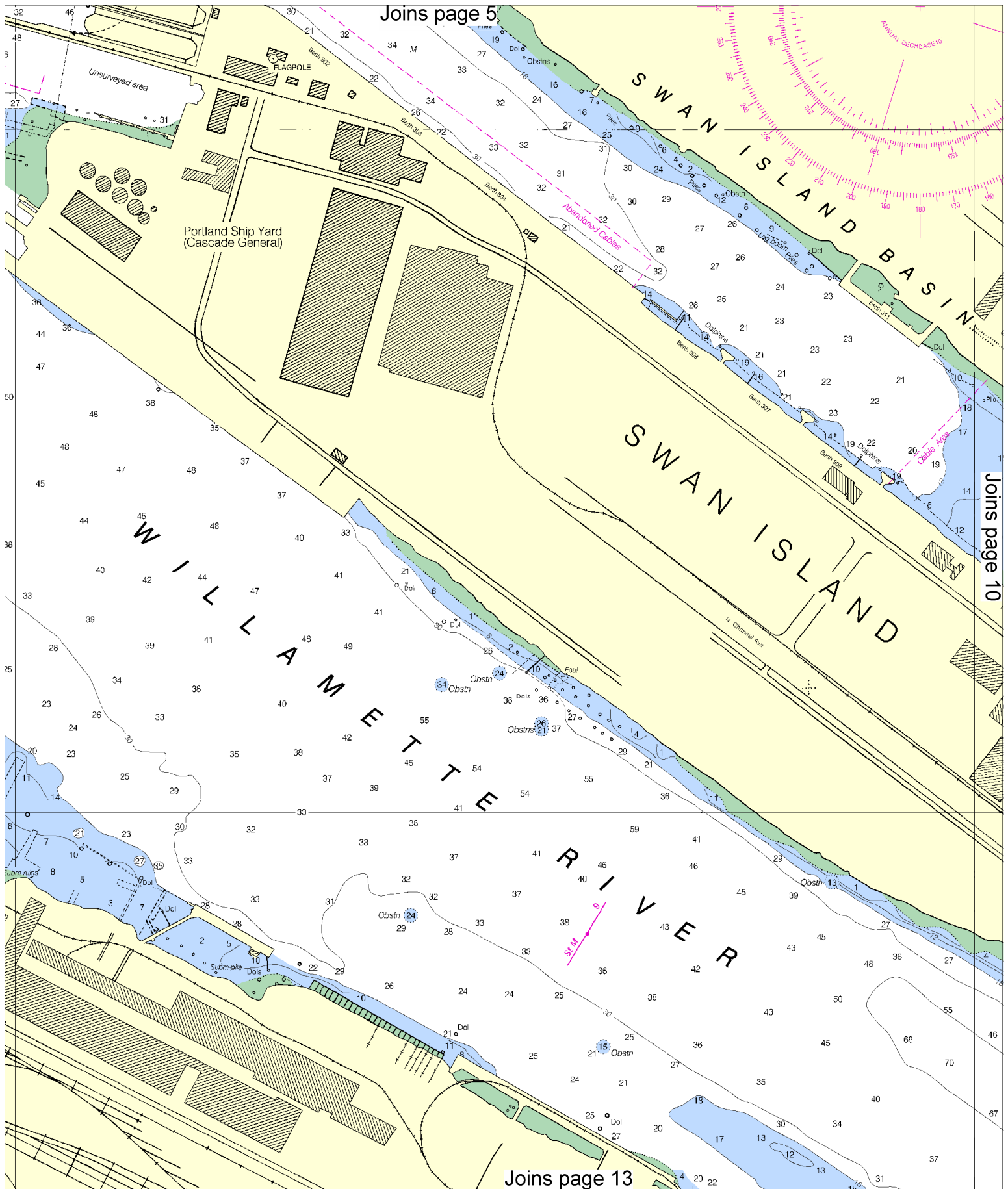


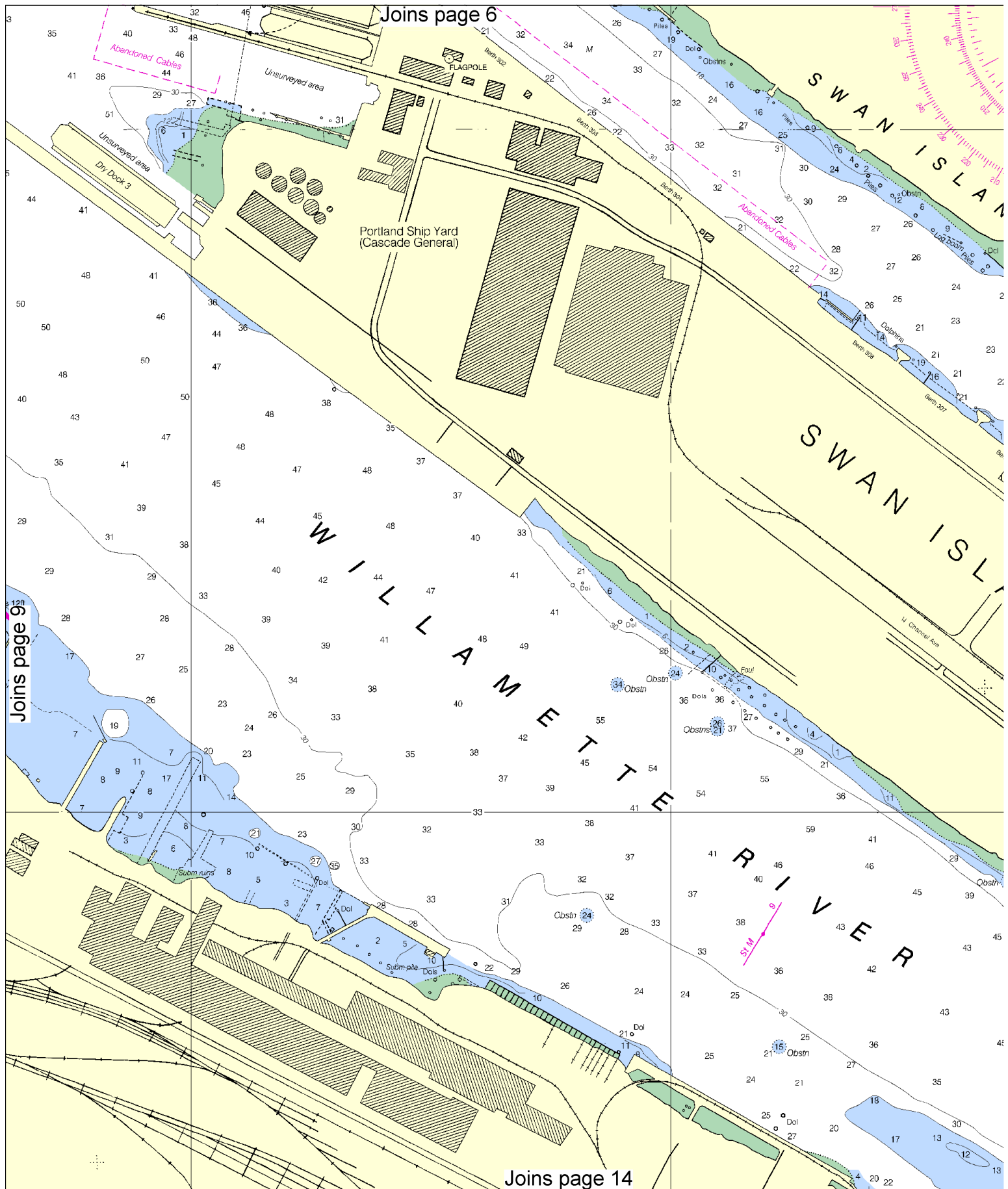
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SCALE 1:5,000
0.5 Nautical Miles

See Note on page 5.







10

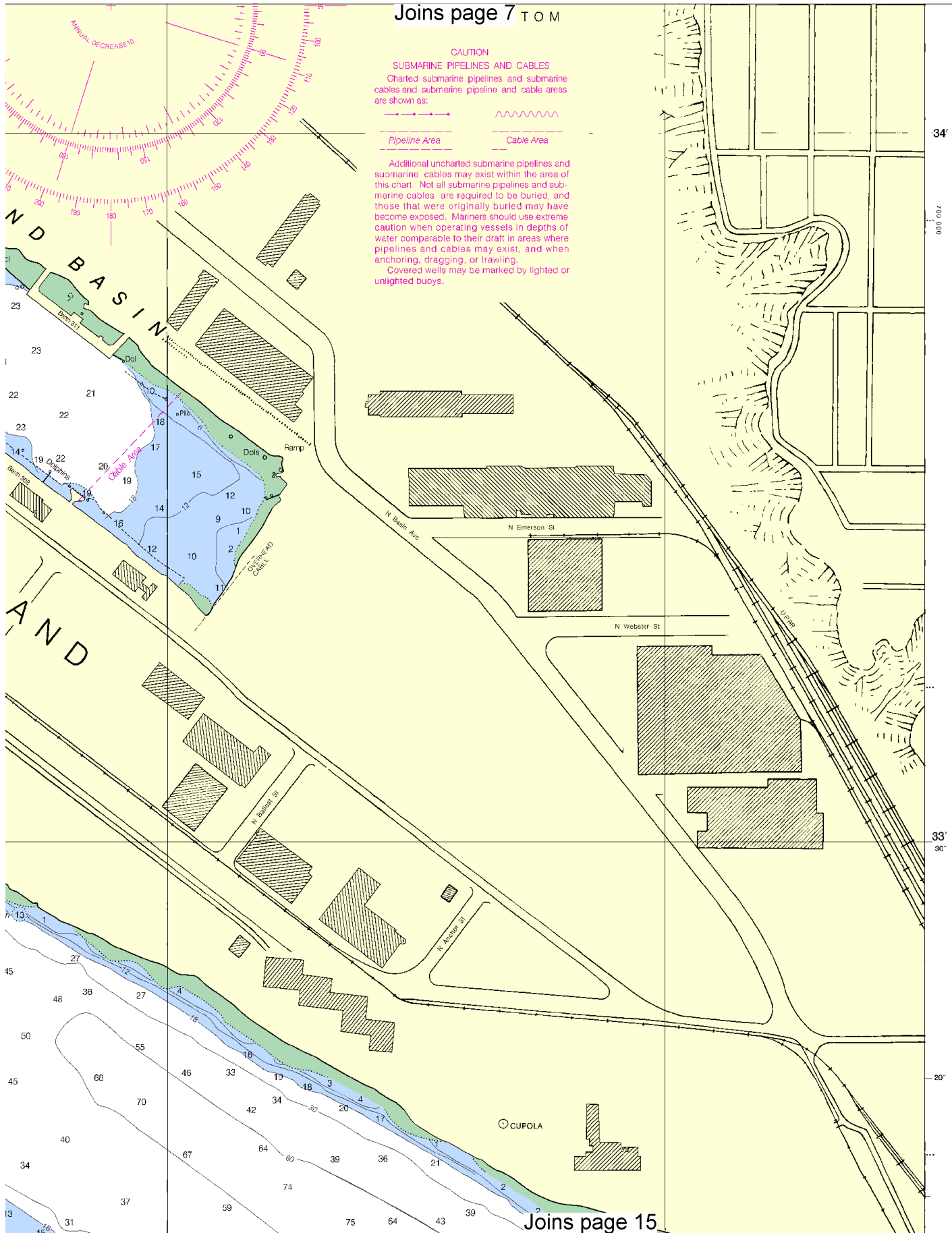


Printed at reduced scale.

SCALE 1:5,000
0.5 Nautical Miles

See Note on page 5.





33°

30"

20"

10"

45°

33'

55°

694,000

AIDS TO NAVIGATION
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NOAA WEATHER RADIO BROADCASTS
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Woodland, WA	WNG-804	162.525 MHz
Astoria, OR	WNG-697	162.525 MHz
Portland, OR	KIG-98	162.55 MHz

STATUTE MILES
WILLAMETTE RIVER
Mileage distances along the Willamette River are in Statute Miles. Distances along the Willamette River are southward from the junction with the Columbia River and are indicated thus:
Tables for converting Statute Miles to International Nautical Miles are given in Coast Pilot 7.

TIDES
The diurnal range of the tide during low river stages is 2.4 feet at Portland. The range becomes progressively smaller with higher stages of the river.
July 2005

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rd rotating
B black	ISO isophase	OESC obscured	SEC sector
Bn beacon	LT Lighthouse	OC occulting	St M statute miles
C can	M nautical mile	Or orange	VO very quick
DIA dialphone	m minutes	Q quick	W white
F fixed	MICRO TR microwave tower	R red	WHIS whistle
Fl flashing	Mkr marker	Ra Ref radar reflector	Y yellow
		R Bn radiobeacon	

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
Bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUT-I authorized	Obstr obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rup reported	

(2) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

HEIGHTS
Heights in feet above Mean High Water.

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

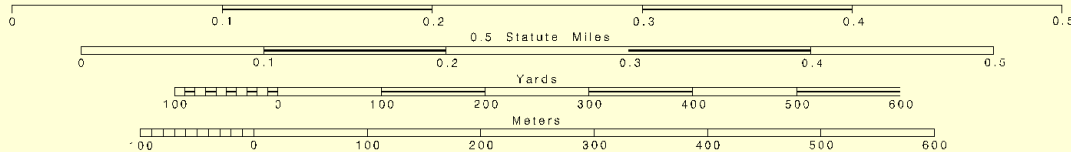
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SUPPLEMENTAL INFORMATION
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PLANE COORDINATE GRID
(based on NAD 1927)
Oregon State Grid North Zone is indicated by dotted ticks at 2000 foot intervals.

CAUTION
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SCALE 1:5,000
0.5 Nautical Miles



To find SPEED, place right point on 60 and left

22nd Ed., Sep. / 05 ■ Corrected through NM, Sep. 24/05
Corrected through LNM Sep. 20/05

18527

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

SOUNDINGS IN F

12

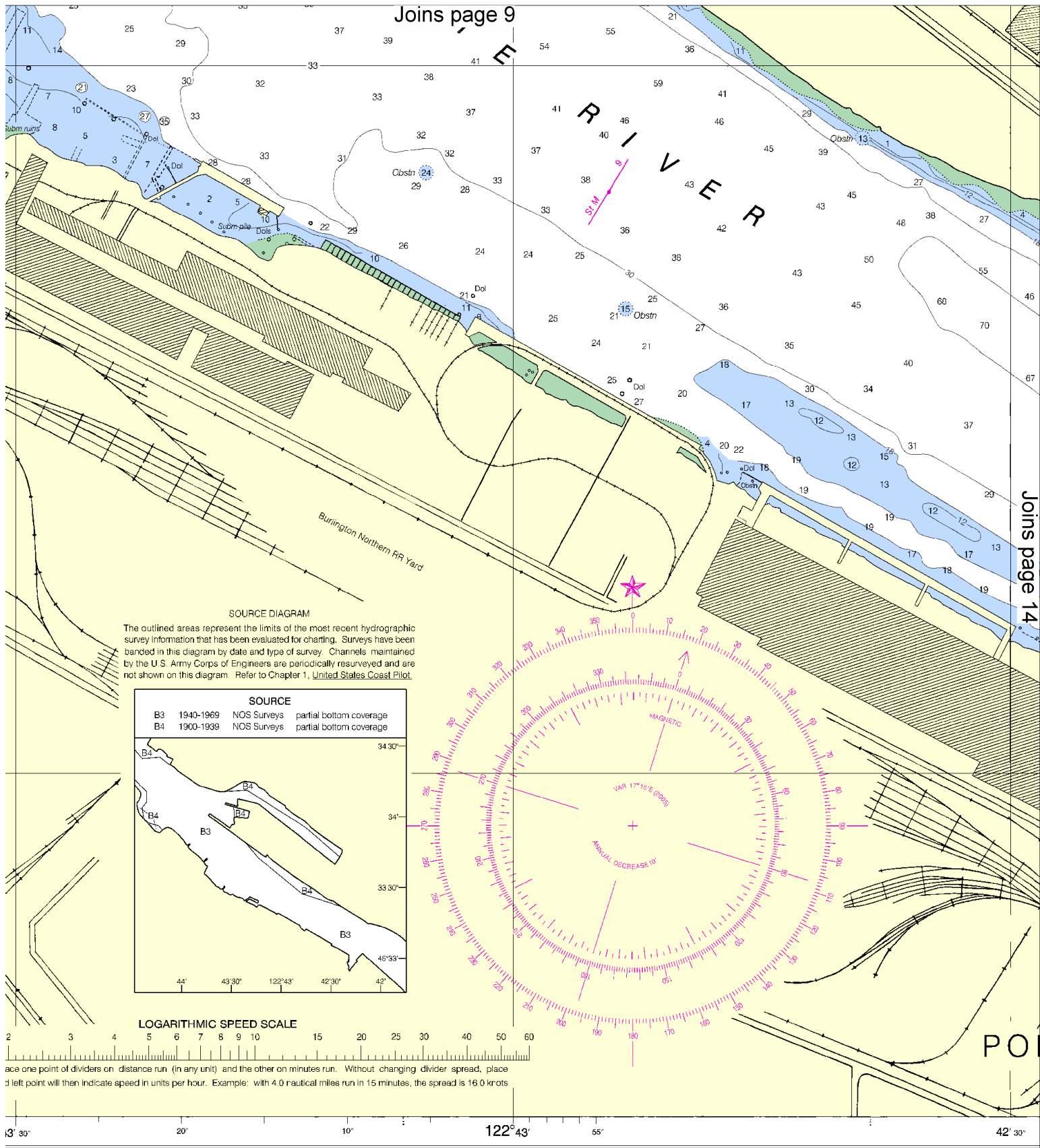


Printed at reduced scale.

SCALE 1:5,000
0.5 Nautical Miles

See Note on page 5.

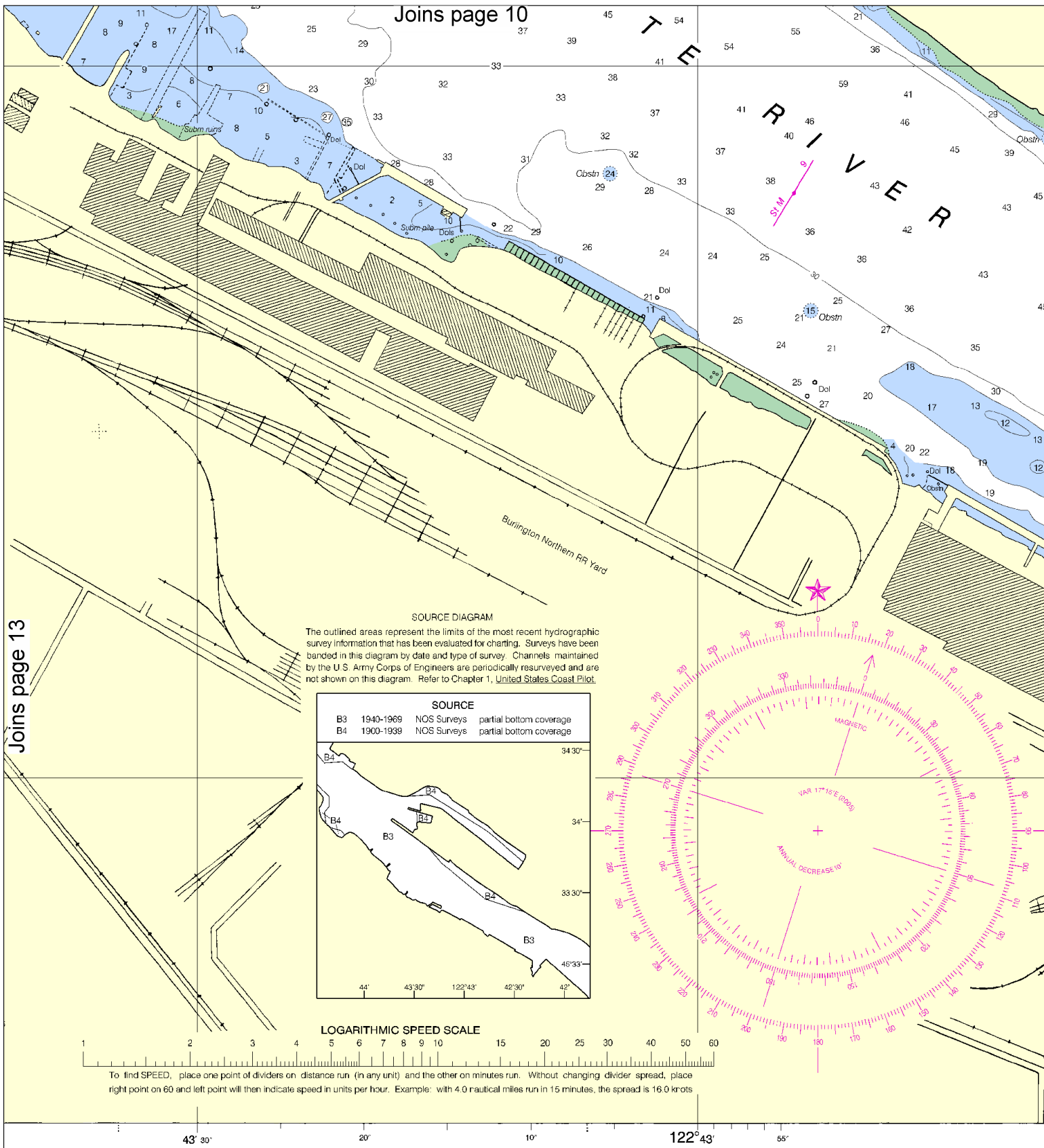




FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

FATHOMS	1	2	3	4	5	6	7	8	9	10
FEET	6	12	18	24	30	36	42	48	54	60
METERS	1	2	3	4	5	6	7	8	9	10



OUNDINGS IN FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

FATHOMS	1	2
FEET	6	12
METERS	1	2

14



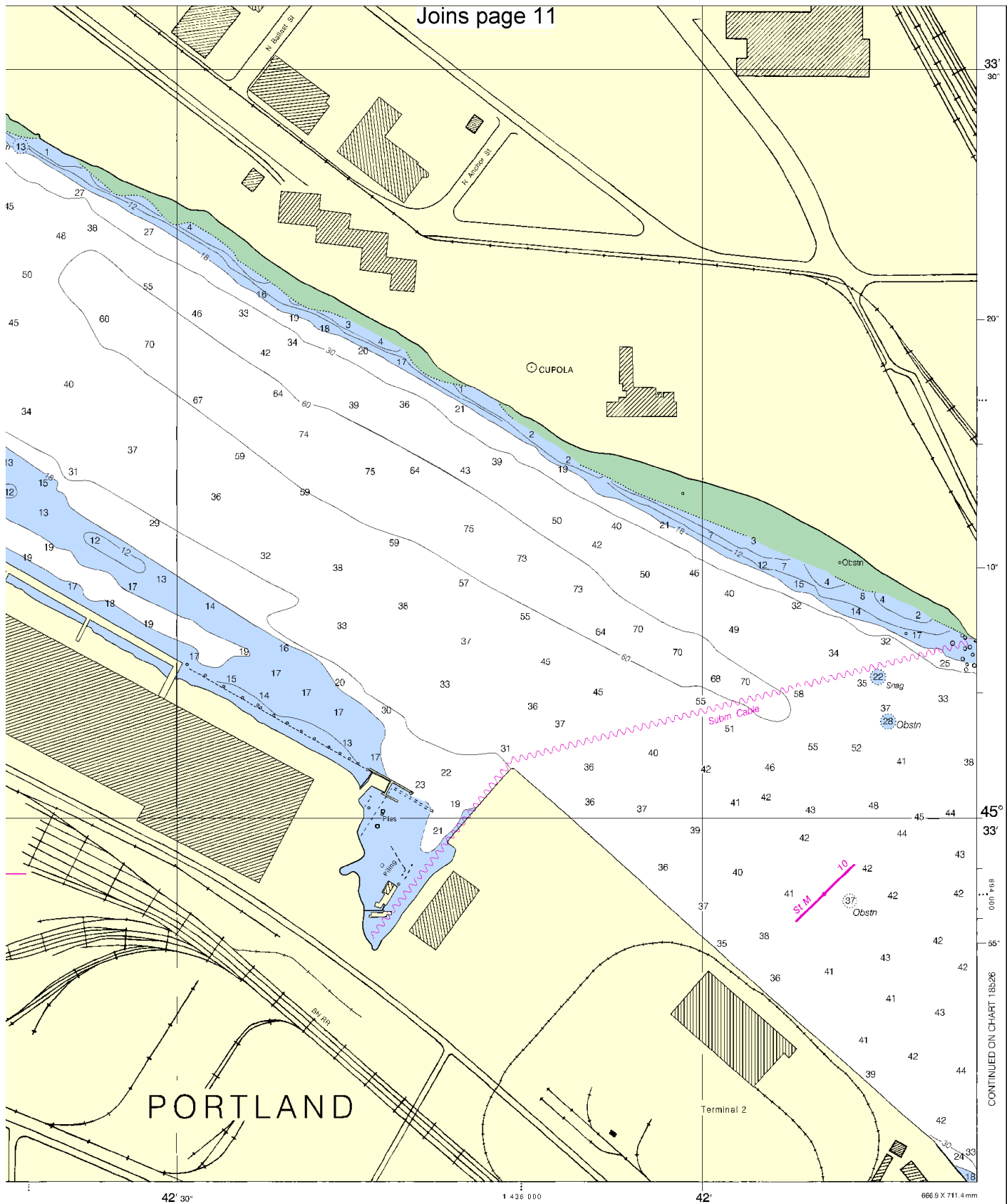
Printed at reduced scale.

SCALE 1:5,000
0.5 Nautical Miles

See Note on page 5.



Joins page 11



CONTINUED ON CHART 18526

ED. NO. 22

NSN 7642014011576

INGA REFERENCE NO. 18BHA18527

27

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EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue – 206-220-7001

Coast Guard Portland – 503-240-9301

Commercial Vessel Assistance – 1-800-367-8222

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S., including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENC[®]) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNC[™]) – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts[™] – PocketCharts[™] are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot[®] – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.